

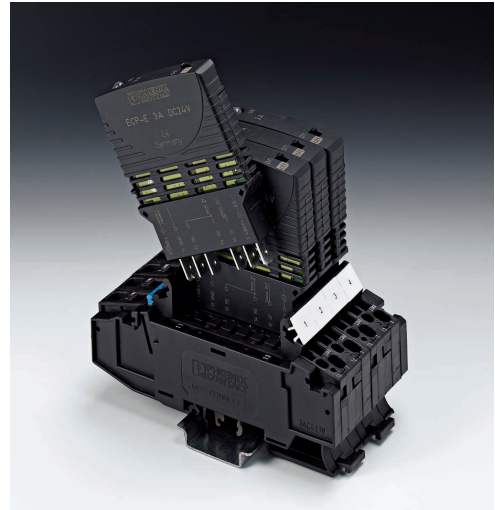
ECP-E

Electronic Circuit Breaker

CLIPLINE

Data Sheet
102898_01_en

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Description

The area of application for the electronic circuit-breaker **ECP-E** extends to all aspects connected with the power supply unit.

In the event of an overload, power supply units reduce their output voltage and all the connected loads are no longer supplied with sufficient power, e.g. in the case of short circuit at the load.

This is remedied here by the electronic circuit breaker ECP-E that protects all 24 V DC load circuits selectively. The ECP-E constantly limits the fault current to 1.8 times the protected nominal current. Capacitive loads can thus be switched on and loads are only switched off in the case of an overload or short circuit.

After detecting an overload or short circuit in the load circuit, the load output of the ECP-E is locked. The current flow is interrupted in the faulty current circuit. The ECP-E and subsequently the current circuit can be activated again through the electronic reset input (13;14) or manually at the device through the slide-type switch.

A multi-color LED as well as the integrated status output (12) display the operating and error status.

Due to its plugging capacity on the TMCP SOCKET M and the narrow width of 12.5 mm, the ECP-E offers a time and space-saving mounting.



Make sure you always use the latest documentation.
It can be downloaded at www.download.phoenixcontact.com.
A conversion table is available on the Internet at
www.download.phoenixcontact.com/general/7000_en_00.pdf.



This data sheet is valid for all products listed on the following page:

Ordering Data

Electronic Circuit Breaker

Description	Type	Order No.	Pcs./Pck.
Electronic circuit breaker, standard variant with status output and reset input, can be plugged into TMCP socket, signaling through three-color LED			
Nominal current 1 A	ECP-E 1A	0900113	5
Nominal current 2 A	ECP-E 2A	0900210	5
Nominal current 3 A	ECP-E 3A	0900317	5
Nominal current 4 A	ECP-E 4A	0900414	5
Nominal current 6 A	ECP-E 6A	0900618	5
Nominal current 8 A	ECP-E 8A	0900812	5
Nominal current 10 A	ECP-E 10A	0901002	5
Nominal current 12 A	ECP-E 12A	0900126	5

Accessories


Description	Type	Order No.	Pcs./Pck.
Modular socket element, 2-pos., for holding 2 circuit 1-pos. breakers, width per position 12.5 mm	TMCP SOCKET M	0916589	10
Socket termination elements, left and right, contain the connections for the control inputs	TMCP CONNECT LR	0916592	3
Zack strip, 10-section, white	ZB 6 (ordering data see CLIPLINE catalog)		

Technical Data

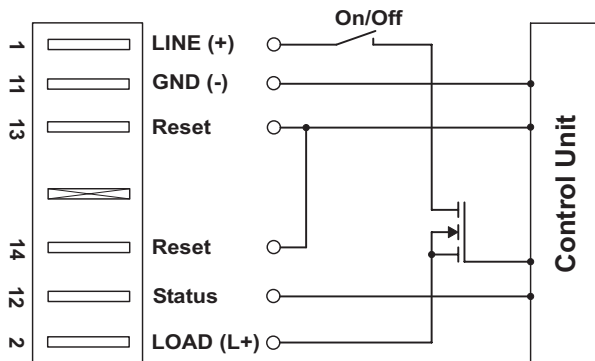
Interrupting Capacity

Load output	Power MOSFET output
Overload interruption	1.1 x I _N , typ.
Interruption time	5 s at I _L > 1.1 x I _N < 5 s at I _L > 1.8 x I _N
Short-circuit current I _k	Active current limitation, 1.8 x I _N , max.
Switch-on delay	300 ms, typ.
Supply voltage DC	24 V DC (18 V DC ... 32 V DC)
R _i when plugged in	≈ 50 mΩ
Reset input	Falling edge DC +24 V

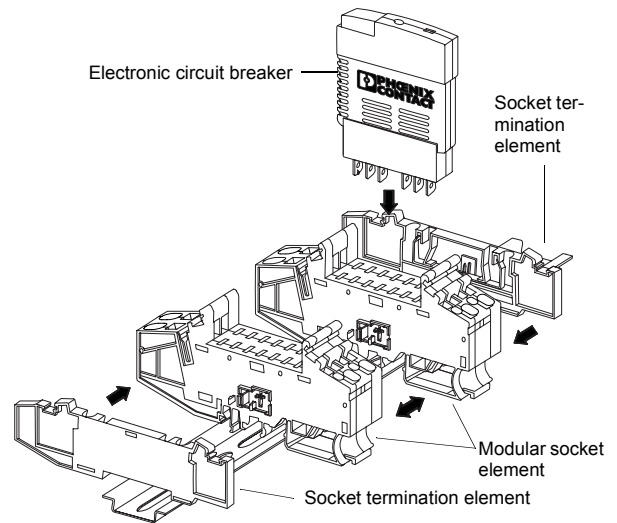
General Data

Width x Length	12.5 mm x 60 mm
Height	
On DIN rail NS 35/ 7,5...	108 mm
On DIN rail NS 35/15...	115.5 mm
Ambient temperature	0°C ... 50°C
Insulating material	PA-F
Inflammability class in accordance with UL 94	V0
Approvals	

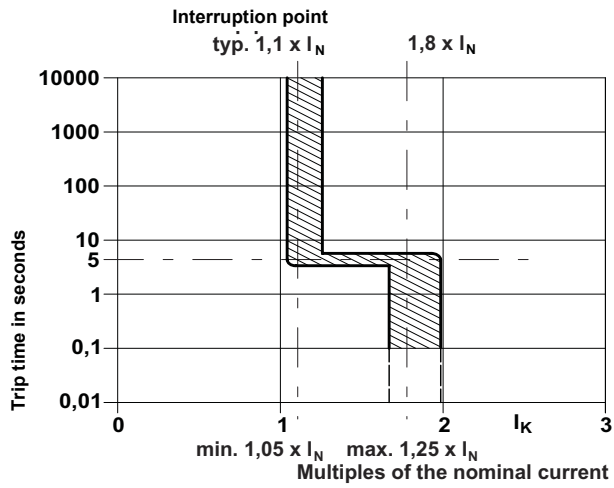
Circuit Diagram



Structure



Time/Current Characteristic Curve



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